

IN THE CLAIMS:

1. (currently amended) A microporous crystalline material of zeolitic nature, characterized in that it has having the empirical formula:



wherein

x has a value less than 0.2;

y has a value less than 0.1:

M is at least one +n charge inorganic cation,

X is at least one chemical element with a +3 oxidation state, ~~preferably selected among Al, Ga, B, Cr, Fe;~~

Y is at least one chemical element with a +4 oxidation state, ~~preferably selected among Ge, Ti, Sn and V;~~

and in that, in an anhydrous and calcinated state, at 540°C, an X-ray diffraction pattern in accordance with

d(Å)	(I/O)*100	d(Å)	(I/O)*100
11.95±0.02	w	3.82±0.05	m
9.19±0.03	vs	3.69±0.03	w
6.85±0.01	s	3.46±0.07	s
6.12±0.05	w	3.32±0.06	m
5.53±0.03	w	3.25±0.08	w
4.86±0.06	w	3.07±0.03	w
4.73±0.04	w	2.98±0.04	w
4.60±0.02	w	2.88±0.05	w
4.48±0.05	w	2.82±0.06	w
4.35±0.04	w	2.66±0.07	w
4.23±0.02	w	2.56±0.05	w
4.11±0.03	w	2.43±0.09	w

3.89±0.04	m	2.35±0.08	w
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wherein

w is a weak relative intensity between 0 and 20%;

m is a ~~an average~~ relative intensity between 20 & 40%;

s is a ~~an average~~ relative intensity between 40 and 60%;

vs is a ~~an average~~ relative intensity between 60 and 100%.

2. (currently amended) A crystalline material according to claim 1, ~~characterized in that~~ wherein

x has a value less than 0.1, ~~preferably less than 0.02,~~

y has a value less than 0.05, ~~preferably less than 0.02.~~

3. (currently amended) A crystalline material according to claim 1, ~~characterized in that~~ wherein x has the value of 0.

4. (currently amended) A crystalline material according to claim 1, ~~characterized in that~~ wherein M is H.

5. (currently amended) A material according to claim 1, ~~characterized in that~~ wherein

x has a value of 0.0025 to 0.035;

M is at least one inorganic cation with an n valence,

X is Al, and

y is zero.

6. (currently amended) A material according to claim 1, ~~characterized in that~~
wherein M is selected from the group consisting of ~~among~~ inorganic cations of the group
~~comprised of~~ hydrogen and ~~alkaline~~ alkali metals.

7. (currently amended) A material according to claim 1, ~~characterized in that~~
wherein M is selected from the group consisting of ~~among~~ Li, Na, K and combinations
thereof.

8. (currently amended) A material according to claim 1, ~~characterized in that~~
wherein M is Li.

9. (currently amended) A material according to claim 1, ~~characterized in that~~ it
has having a Si/X ratio between 30 and 400.

10. (currently amended) A material according to claim 1, ~~characterized in that~~
wherein before calcination it is a precursor with an X-ray diffractogram according to

d(Å)	(I/I ₀)*100	d(Å)	(I/I ₀)*100
11.22±0.02	vs	3.60±0.08	s
10.10±0.03	w	3.53±0.05	vs
8.81±0.05	w	3.42±0.06	s
7.05±0.01	w	3.36±0.04	s
6.30±0.01	m	3.32±0.05	w
5.60±0.02	w	3.30±0.01	w
5.28±0.05	s	3.14±0.07	w
4.98±0.06	s	3.10±0.02	w
4.72±0.01	w	3.09±0.03	w
4.38±0.02	s	3.01±0.01	w
4.21±0.02	s	2.81±0.04	w

3.90±0.03	w	2.61±0.04	w
3.83±0.08	m	3.51±0.05	w
3.73±0.07	m	2.48±0.09	w.

11. (currently amended) A process to synthesize the crystalline material of claim 1, ~~characterized in that it comprises~~ comprising

a first step wherein a precursor is prepared by subjecting to heating, with or without stirring, at a temperature between 100 and 225°C, ~~preferably between 125 and 200°C~~, a reaction mixture that contains

a SiO₂ source,

optionally a source of at least another tetravalent element Y ~~preferably selected among Ge, Ti, V, Sn,~~

optionally a source of at least another trivalent element X ~~preferably selected among Al, B, Ga, Fe, Cr,~~

an organic cation ~~1-methyl-1,4-diazabicyclo[2,2,2]octane~~ as a structure directing agent,

optionally an inorganic cation, ~~preferably a source of an alkaline metal such as for example, an oxide, hydroxide or salt of lithium, sodium or potassium,~~

and water,

wherein the reaction mixture has a composition, in terms of molar ratios of oxides, comprised in the ranges of

ROH/SiO₂=0.01-1.0, ~~preferably 0.1-1.0,~~

M_{1/n}OH/SiO₂=0-1.0, ~~preferably 0-0.2,~~

X₂O₃/SiO₂=0-0.1, ~~preferably 0-0.05, and more preferably 0-0.01,~~

YO₂/(YO₂+SiO₂) less than 1, ~~preferably less than 0.1,~~

H₂O/SiO₂=0-100, ~~preferably 1-50,~~

wherein

M is at least one +n charge inorganic cation;

X is at least a trivalent element, ~~preferably selected among Al, Ga, B, Cr, Fe;~~

Y is at least a tetravalent element, ~~preferably selected among Ge, Ti, Sn, V;~~

R is an organic cation, ~~preferably 1-methyl-1,4-diazabicyclo[2,2,2]octane,~~

until crystallization of the reaction mixture is achieved;

a second stage wherein the precursor is dried and subjected to calcination.

12. (currently amended) A process according to claim 11, wherein ~~characterized in that~~ the organic cation 1-methyl-1,4-diazabicyclo[2,2,2] octane is added in the form of a hydroxide and another salt, ~~preferably halide~~, to the reaction mixture.

13. (currently amended) A process according to claim 11 or 12, wherein ~~characterized in that~~ the precursor is calcinated in an air flow, at a temperature between 300°C and 800°C for at least 3 hours.

14. (currently amended) A process according to claim 11, wherein ~~characterized in that~~ an amount of crystalline material, ~~preferably with the characteristics of the material of one of claims 1 to 4,~~ is added to the reaction mixture as a crystallization promoter, said amount being comprised between 0.01 and 15%, ~~preferably between 0.05 and 5%,~~ by weight referred to the total amount of silica added.

15. (original) A catalyst in the catalytic conversion process of organic compounds comprising a microporous crystalline material of zeolitic nature defined in claim 1.

16. (original) A method of dewaxing of paraffins comprising contacting said paraffins with the catalyst of claim 15.

17. (original) A method for the isodewaxing of wax comprising contacting said wax with the catalyst of claim 15.

18. (original) A method for toluene deproportionation comprising contacting said toluene with the catalyst of claim 15.

19. (new) A microporous crystalline material of zeolitic nature, according to claim 1, wherein X is at least one chemical element with a +3 oxidation state, selected from the group consisting of Al, Ga, B, Cr and Fe.

20. (new) A microporous crystalline material of zeolitic nature, according to claim 1, wherein Y is at least one chemical element with a +4 oxidation state selected from the group consisting of Ge, Ti, Sn and V.